ABSTRACT OF THE DISCLOSURE

A presentation board digitizer system for large boards preferably employs at least three spaced-apart ultrasound receivers assemblies. A current position of an ultrasound transmitter is assigned as a weighted centroid of time-of-flight position measurements based on at least two pairs of receiver assemblies. The weighting used varies as a function of the position of the transmitter across the board. A preferred structure of an ultrasound receiver assembly for use in the system employs a pair of ultrasound receivers arranged side-by-side in a line perpendicular to the surface of the presentation board. The receivers are connected so as to generate a total output signal corresponding to the instantaneous sum of the ultrasound signals received at each, such that the receiver assembly is most sensitive to ultrasound signals incident from a plane adjacent to the presentation board. Also described are a transmitter device for use with a conventional pen in which the ultrasound transmitter is a cylindrical element lying coaxial with the pen and adjacent to its tip, and a jointed eraser structure.